

# Workshop Tasks

- Group 1 – What are the four historical stages in information technology (IT) applications according to Stephenson and Anderson (1997)? (Identify two examples of major IT developments for each of the stages).
- Group 2 – According to Stephenson and Anderson (1997), what major trends and technologies define the current situation?
- Group 3 – Select and illustrate two short-term and two long-term probable outcomes in IT development that will most impact emergency managers.
- Group 4 – Select and illustrate five types of potential impacts on emergency management activities and programs that may be induced by the development of digital libraries.

# Implementation Barriers

- Insufficient staff for data input
- Machine incompatibility
- Obtaining software information
- Budget constraints and regulations
- Constraints on system expansion
- Inadequate staff training

Source: Adapted from Drabek, Thomas E. 1991. *Microcomputers in Emergency Management*. Boulder, Colorado: Institute of Behavioral Science, University of Colorado, pp. 60-62.

# IT Difficulties During Disaster Responses

- Software Inadequacies
- Staff Shortages
- Data Base Problems

Source: Adapted from Drabek, Thomas E. 1991. *Microcomputers in Emergency Management*. Boulder, Colorado: Institute of Behavioral Science, University of Colorado, pp.144-145.

# 10 Problematical Issues: The IT Revolution and Disaster Management

- “Rich will become richer” in dealing with disasters
- “Means-ends” transition
- Information overload
- Loss of, and/or use of outdated, information
- Diffusion of inappropriate information
- Diminution of non-verbal communication
- Increased difficulty in intra and inter-group communication
- Acceleration of fads and fashions
- Absence of necessary infrastructures and cultures
- Computer system-related disasters

Source: Adapted from Quarantelli, E.L. 1997. “Problematical Aspects of the Information/Communication Revolution for Disaster Planning and Research: Ten Non-technical Issues and Questions.” *Disaster Prevention and Management* 6:94-106.

# Impacts of Microcomputer Technology: Internal

- New positions created
- Staff responsibilities redefined
- New policies developed
- New understandings established
- Budget stability provided
- Staff upgrades
- Improved morale

Source: Adapted from Drabek, Thomas E. 1991. *Microcomputers in Emergency Management*. Boulder, Colorado: Institute of Behavioral Science, University of Colorado, pp. 106-110.

# Impacts of Microcomputer Technology: External

- Enhanced professional image
- Increased network centrality
- New agency relationships

Source: Adapted from Drabek, Thomas E. 1991. *Microcomputers in Emergency Management*. Boulder, Colorado: Institute of Behavioral Science, University of Colorado, pp.113-116.